

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Anis Rahman on 1/9/07.

The application has been amended as follows:

in claim 33, line <sup>15</sup>~~17~~,

after "wherein the", replace --- waveguide satisfies the NIC requirements ---, with "first layer and the second layer have refractive indices in a difference ratio to fall within a predetermined natural index contrast range,

wherein the NIC value has a range of >0% to ~240%,";

in claim 43, line <sup>16</sup>~~17~~,

after "wherein the waveguide", replace --- satisfies the NIC requirements--- with "comprised of the first layer and the second layer have refractive indices in a ratio that fall within a predetermined natural index contrast range,

wherein the NIC value has a range of >0% to ~240%,";

in claim 54, line 6,

after "first refractive index", add "wherein the first layer, the second layer and the third layer form at least one waveguide;"

in claim 54, line 7,

after "wherein" replace --- waveguides are --- with "the at least one waveguide is";

in claim 54, line 8,

after " wherein the", replace --- waveguides, --- with "at least one waveguide";

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in claim 54, lines 8-9,

after " blocks of the PIC," replace --- satisfies the NIC requirements. --- with "has the first layer and the second layer refractive indices in a ratio that satisfy a predetermined natural index contrast range; wherein the NIC value has a range of >0% to ~240%.

Claims 20-58 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art does not disclose or suggest a photonic integrated circuit (PIC) comprising all the specific elements with the specific combination as set forth in claims .

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### **Conclusion**

In formation regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for